Frankfurt,
8 July 2022

BVI[1] position paper on IOSCO's discussion paper:
Corporate Bond Markets – Drivers of Liquidity During COVID-19 Induced Market Stresses

As representative of the largest European fund market and of the German buy-side, we are happy to contribute our practical expertise to the discussion paper of the International Organisation of Securities Commissions (IOSCO) in order to better understand the drivers of liquidity during COVID-19 induced market stresses, in particular, in the corporate bond market.

In the EU, a total of more than EUR 13 trillion is invested in investment funds by private and institutional investors. With assets of EUR 3,600 billion, Germany is the largest market (according to the ECB) with a market share of 27 percent. An annual growth rate of 9.6 percent makes Germany one of the fastest growing markets, surpassing, for instance, France, Italy, and The Netherlands.

Regarding the questions raised by IOSCO, we would like to point out the following considerations.

Summary of key outcomes of IOSCO's report

1. *What are your views on the key outcomes drawn from IOSCO's analysis of the corporate bond markets? Are there any aspects of the diagnostic analysis and the key outcomes with which you disagree or that would benefit from more nuance? Are there additional regional or jurisdictional specific considerations? Please be specific to each observation and indicate why.*
2. *Does the report capture and accurately describe the main features of the corporate bond markets? Is there a particular aspect (or aspects) that may be missing?*
3. *Are there ways to improve the market functioning and liquidity provision in corporate bond markets, notably under stressed market conditions? If so, please explain how and the extent to which this could be addressed at an international level?*

In general, we agree with the key outcomes drawn from IOSCO's analysis of the corporate bond market and refer for further explanations also to our answers to the following questions.

The German market is dominated by funds for institutional investors, so called 'Spezialfonds' which are alternative investment funds (AIFs) employing very different investment strategies and show a diverse investor base. At the end of December 2021, investment management companies managed assets of almost EUR 2.2 trillion in 'Spezialfonds'. This represents over 60 percent of total fund assets of the German market. Open-ended securities funds, including many balanced funds, contributed the major part. Open-ended real estate funds, money market funds and closed-ended products play only a minor role. Over the last ten years, overall assets managed by 'Spezialfonds' have grown by an average of approximately ten percent per year.

Measured by assets under management, fixed income is among the asset class with the highest share in institutional portfolios: As of April 2022, 45 percent of the assets of open-ended Spezialfonds were directly held fixed-income securities. Of these, two-thirds (or EUR 600 bn) were corporate bonds, often

[1] BVI represents the interests of the German fund industry at national and international level. The association promotes sensible regulation of the fund business as well as fair competition vis-à-vis policy makers and regulators. Asset Managers act as trustees in the sole interest of the investor and are subject to strict regulation. Funds match funding investors and the capital demands of companies and governments, thus fulfilling an important macro-economic function. BVI's 116 members manage assets of some EUR 4 trillion for retail investors, insurance companies, pension and retirement schemes, banks, churches and foundations. With a share of 28%, Germany represents the largest fund market in the EU. BVI's ID number in the EU Transparency Register is 96816064173-47. For more information, please visit www.bvi.de/en.

issued by banks or other financial institutions. In addition, a smaller but unknown amount of bonds was held indirectly, i.e. via investment funds[2]. The growth of the German corporate bond market seems set to continue. While until the financial crisis of 2007-8 bonds tended to be a form of financing for larger German companies and corporations, since then more and more medium-sized companies - both listed and unlisted - have chosen bonds as a form of financing. The nominal value of outstanding bonds issued by German non-financial corporations has increased form EUR 96 bn in December 2007 to EUR 393 bn in April 2022[3]. At some German stock exchanges, special trading segments have been introduced for bonds of medium-sized companies, e.g. BondM at the Stuttgart Stock Exchange or Entry Standard at Deutsche Börse Group. This may be due to the fact that against the background of stricter equity capital requirements for banks, corporate loans have generally become more expensive and credit institutions are increasingly reluctant to enter into new commitments. Financing through bonds is therefore becoming increasingly important and also attractive for companies, especially medium-sized ones. Corporate bonds are often placed with a broad (sometimes also international) investor audience.

In addition to institutional investors, retail investors are also involved. Direct ownership, however, is hardly relevant for private individuals anymore. At the end of 2021, they held bonds worth around 100 billion euros, compared to over 300 billion euros in 2005.

Moreover, after spectacular defaults mid-market bonds overvalued by local credit-rating agencies, this market has come to a standstill.

4. What further work, if any, should IOSCO consider in the context of corporate bond markets?

We see the need to further discuss about **macro-policy tools** that can be used by supervisors such as national competent authorities (NCA), ESMA, the European Systemic Risk Bord (ESRB) or IOSCO for their own analysis to identify potential systemic risk. The German NCA (BaFin)[4], for instance, has started a new central Data Intelligence Unit (DIU) and a digital supervisor cockpit to form the backbone of IT-driven supervision of the financial sector. ESMA introduced the STRESI solution (stress simulation for investment funds)[5]. In this regard, these analyses should be based on data reported by the supervised entities. Moreover, it is important to set up or improve the information sharing process between all supervisors.

However, **narrowing down the range of eligible assets is not a commensurate measure to address any perceived shortcomings identified in individual cases with internal and external governance failures on fulfilling the strict framework for asset managers. The same applies to liquidity buffers in investment funds.** Instead, we are in favour of further developing the governance requirements while retaining the flexibility in terms of eligible exposures and liquidity management.

In Europe, ESMA envisages the following five priority action areas for investment funds investing in corporate bonds, which we support: (1) ongoing supervision of the alignment of the funds' investment strategy, liquidity profile and redemption policy, (2) ongoing supervision of liquidity risk assessment, (3) reporting on the liquidity profile of the funds, (4) increasing the availability and use of

[2] Deutsche Bundesbank, https://www.bundesbank.de/en/statistics/banks-and-other-financial-corporations/investment-companies.

[3] Deutsche Bundesbank, https://www.bundesbank.de/en/statistics/macroeconomic-accounting-systems/financial-accounts

[4] More 'bite' for the Financial Supervisory Authority, https://www.bundesfinanzministerium.de/Content/EN/Standardartikel/Topics/Financial_markets/Articles/2021-02-03-more-bite-for-the-financial-supervisory-authority.html.

[5] Available under the following link: https://www.esma.europa.eu/sites/default/files/library/esma50-164-2458_stresi_report.pdf.

liquidity management tools, and (5) supervision of valuation processes in a context of valuation uncertainty. From a financial stability perspective, ESMA considers that these measures reduce the risk and the impact of collective selling by funds on the financial system. While the overall degree of compliance is satisfactory in the evaluation in 2022, ESMA also highlights some room for improvement and continued monitoring, especially on the liquidity stress testing and valuation of less liquid assets. Many NCAs reported that management companies were able to manage episodes of valuation uncertainty in March 2020 and that they have not identified any strong valuation issue for the funds in the scope of the exercise.

ESMA will continue to monitor this risk through regular assessments of the resilience of the fund sector. In addition, ESMA adopts the ESRB's recommendations on liquidity and leverage of funds and points out that under the UCITS and AIFMD all liquidity management tools should be made available.

In addition, the **ESRB calls in a statement[6] for fund managers to use liquidity management tools**, especially for funds that invest in less liquid assets or assets that become temporarily illiquid and have short redemption periods. This is because these tools could help mitigate the dynamics of first-mover advantage and the risk of distress selling.

German fund industry sets standards in using liquidity management tools in open-ended investment funds for retail investors: Germany had already introduced holding and notice periods for open-ended real estate funds for retail investors years ago. Alongside swing pricing and notice periods, redemption restrictions complement the existing toolbox for German open-ended funds investing in securities (including corporate bonds) since March 2020. They serve to reduce systemic risks and protect investors, even though their rights may exceptionally be restricted in difficult market situations and help to avoid the use of the sharpest tool of all, fund closure. Institutional investors and fund-of-funds managers can also benefit from this.

Box 1: German practical guidance on gating

Together with the German banking industry, we have published a practical guidance[7] on the implementation of redemption restrictions (gating) for open-ended securities funds (especially UCITS). The guidance considers the entire process chain: from the management company to the depositary, to the custodians. The ‘pro-rata solution with expiry of the residual order’ developed for the German market is also permissible in France[8]. We consider this solution to be forward-looking, even though the Luxembourg supervisory authority[9] has not yet recognised this approach. In an intensive exchange with all parties involved, we have succeeded in setting up a pragmatic and, for the first time in the EU, automated process for the mass business of open-ended retail funds.

[6] ESRB, Use of liquidity management tools by investment funds with exposures to less liquid assets, available under the following link: https://www.esrb.europa.eu/home/search/coronavirus/shared/pdf/esrb.publicstatement200514_on_the_use_of_liquidity_management_tools_by_investment_funds_with_exposures_to_less_liquid_assets.en.pdf.

[7] Available under the following link: https://www.bvi.de/fileadmin/user_upload/Regulierung/Branchenstandards/Praxisleitfaden_R%C3%BCcknahmebeschr%C3%A4nkung/211230_redemption_gates_practical_guidance_BVI-DK_final.pdf.

[8] AMF, Conditions for setting up redemption gate mechanisms, Instruction DOC-2017-05, applicable from 15 March 2017, available under the following link: https://www.amf-france.org/en/regulation/policy/DOC-2017-05.

[9] CSSF, Circular IML 91/75 as amended by Circulars CSSF 05/177 and CSSF 18/697, Luxembourg, 21 January 1991, available under the following link: https://www.cssf.lu/wp-content/uploads/iml91_75.pdf.

Background of corporate bond markets globally

5. Are the features and key characteristics of the corporate bond markets accurately captured and described? Is there a particular aspect (or aspects) that may be missing?

The features and key characteristics introduced in the discussion paper are appropriately captured and described.

Liquidity during the COVID-19 induced stress

6. Does the report accurately describe the state of liquidity in corporate bond markets during the COVID-19 induced market stress across the three stated measures employed in the report?

Market illiquidity and implications for asset managers assessed by the ESRB: The sharp drop in prices observed at the start of the COVID-19 pandemic in March 2020 was accompanied by significant outflows from some investment funds and a deterioration in the liquidity of financial markets. While market conditions have stabilised, the European Systemic Risk Board (ESRB) was concerned that investment funds will face further redemption pressure if the macroeconomic outlook deteriorates more than it was expected. The ESRB therefore issued a Recommendation[10] requesting the European Securities and Markets Authority (ESMA), in consultation with national supervisors, to assess the risks of funds that invest significantly in corporate bonds and real estate. In particular, supervisors should analyse possible future adverse shocks, taking into account potential significant redemptions, redemption frequency, leverage and any uncertainties in the valuation of these rather illiquid assets. The ESRB also expects to hear whether there is a need for additional action in relation to these funds (e.g., further guidance on the use of liquidity management tools or on how to deal with the valuation of assets in the crisis). The Recommendation also highlights the specific regulatory framework for UCITS and AIFs, which already contains strict risk and liquidity management requirements. With this initiative, the ESRB wants to ensure that supervisors are prepared for possible new crises. The measures are part of the ESRB's priorities for dealing with systemic risks in the crisis, with a focus on financial market liquidity and the impact on asset managers.

Main results of ESMA's analyses in 2020 and the follow-up in 2022: ESMA has published a report[11] analysing how funds investing in real estate and corporate bonds could react to future liquidity and valuation shocks. Most important findings from the COVID-19 crisis: **The funds exposed to corporate debt and real estate funds under review overall managed to adequately maintain their activities when facing redemption pressures and/or episodes of valuation uncertainty**. ESMA confirms this finding in a press release[12] as the result of a further evaluation of a supervisory engagement with investment funds together with National Competent Authorities (NCAs). **The new results in 2022 show that the funds included in the scope of the analysis do not pose any substantial risk for financial stability.**

However, the report published in 2020 also points to shortcomings that need to be addressed to better prepare these funds for future market turbulence. In particular, the results should be interpreted with caution the redemption shock associated with the COVID-19 crisis was concentrated in a short period of time, amid significant intervention by governments and central banks to support the markets. In

[10] Recommendation of the ESRB of 6 May 2020 on liquidity risks in investment funds, Ref. ESRB/2020/4 (2020/C 200/01).
[11] ESMA, Report, Recommendation of the European Systemic Risk Board (ESRB) on liquidity risk in investment funds, 12 November 2020, Ref. ESMA34-39-1119, available under the following link: https://www.esma.europa.eu/sites/default/files/library/esma34-39-1119-report_on_the_esrb_recommendation_on_liquidity_risks_in_funds.pdf.
[12] ESMA, press release, published on 30 March 2022, available under the following link: https://www.esma.europa.eu/press-news/esma-news/esma-and-ncas-find-room-improvement-in-funds%E2%80%99-liquidity-stress-testing.

addition, some funds exhibited potential liquidity mismatches due to their potential liquidity mismatches that should be addressed. This is particularly the case for funds that invest in asset classes that are inherently illiquid and, at the same time, have a combination of high redemption frequency and short notice periods. Against this background, fund managers authorised under the UCITS and AIFM Directives should increase their sensitivity to possible future adverse shocks that could lead to a deterioration in financial market liquidity and valuation uncertainty.

Liquidity transformation: BVI redemption analysis of German open-ended retail funds. Analysis of the German open-ended retail investment fund market shows that investment management companies for the most part can manage liquidity risks to fulfil daily redemptions of fund units. Moreover, it is important to state that liquidity management depends on the types of assets, investors, investment strategies, markets, and possible national legal restrictions for using liquidity management tools.

In 2010, BVI assessed the issue of liquidity management for different kinds of securities funds such as equity, bond, or mixed funds. In 2015/2016, BVI broadened the approach to open-ended real estate funds. In a nutshell, evidence based on historical data showed that a liquidity ratio of 20 per cent can be considered as a robust prerequisite to fulfil redemption requests. These results (cf. overview of BVI redemption analysis, **Annex**) were obtained using on the following process:

The management company compares the liquidity ratio of the fund with determined changes of outflows based on historical BVI statistical data for the relevant fund's category. If the liquidity ratio of the fund is higher than the ratio of short-term outflows, in principle, the fund is protected from liquidity shortfalls. However, if the liquidity ratio is lower than the ratio of short-term outflows, the management company should assess further aspects which imply further possibilities for action (such as analyses of the historical short-term outflows of the specific fund, analyses of the current unit holder structure, assessment of the expected future short term outflows, special borrowing facilities etc.).

- **Determination of the liquidity ratio of the fund:** As a first step, the management company assesses weather the assets in which the investment fund is invested are liquid or not, resp. evaluates the degree of liquidity. Then it determines the liquidity ratio of the fund as the ratio between the value of the liquid assets and the net asset value of the fund (NAV). This process is also in line with the current requirements of the AIFMD[13] according to which the manager is obliged to maintain a level of liquidity in the investment fund appropriate to its underlying obligations, based on an assessment of the relative liquidity of the investment fund's assets in the market, taking account of the time required for liquidation and the price or value at which those assets can be liquidated, and their sensitivity to other market risks or factors.

- **Outflows of the fund resulting from redemptions of units:** The assessed liquidity ratio of the fund then should be compared to the average redemption situation of the relevant fund category ascertained on a historical basis. For this purpose, BVI has conducted statistical evaluations based on the BVI investment fund statistics between 2003 and 2015 (based on over 7,100 retail funds and monthly cumulative changes of the funds' outflows).

As a result, significant redemptions of more than 20 percent of the NAV monthly occurred in 2 to 4 percent of all samples, depending on fund categories such as equity funds, bond funds and mixed funds. Many of these cases can be explained by exceptional market conditions or movements (e.g., times of crisis, collection of profits etc.). **After the financial crisis of 2008, management companies funded**

[13] Cf. Article 47(1)(a) of the Delegated Regulation (EU) No 231/2013.

nearly all outflows without the use of additional liquidity management tools.[14] **In summary, when looking back to the post-crisis scenario after 2008, significant outflows first increased and later decreased slightly in open-ended retail investment funds, but not to the pre-crisis level. However, the average levels of significant net outflows did not change over time.**

Over time, we can also see that open-ended retail funds with an investment focus on corporate bonds saw net outflows in March 2020. However, these have stabilised again overall.

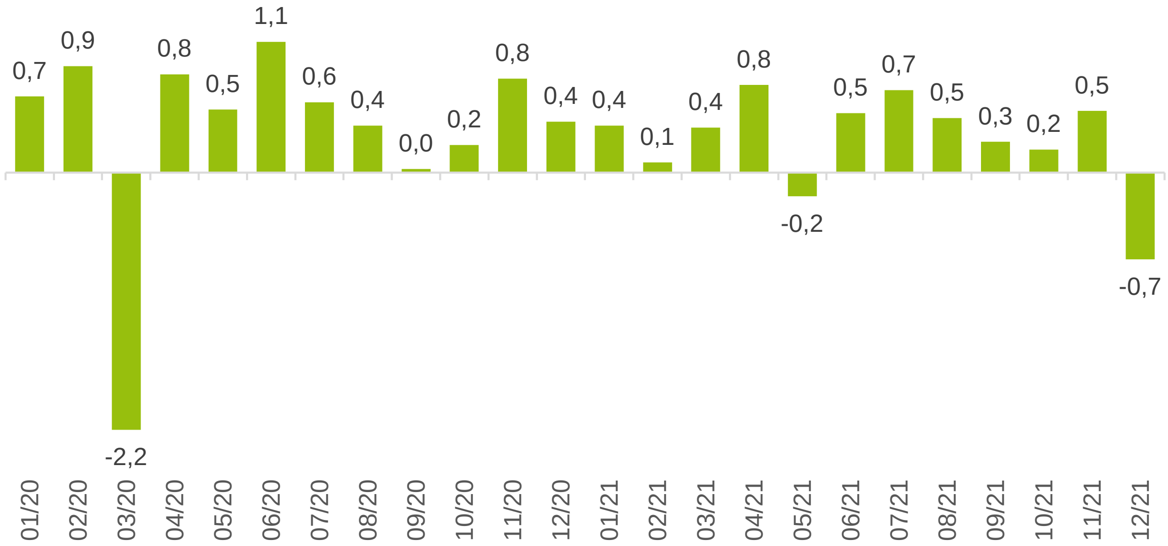

Figure 1: Net flows into corporate bond UCITS by German investors in EUR billions

In this context, we would like to refer to the findings of a paper provided by *Christof Stahel*[15] who analyses the behaviour of investors with overlapping portfolios: According to his summary, over the period from 2000 to 2021, direct investors with overlapping portfolios, those that invest in assets through separately managed accounts, exhibit a concave flow-performance relationship in portfolios that contain less liquid assets. He also finds that such behaviour is more accentuated during periods of lower market liquidity, for less liquid portfolio, and for strategies with large account balances. Together, these results suggest that a more general explanation generates observationally equivalent investor behaviour.

[14] The exceptions apply to 16 open-ended real estate funds (OREF) and 13 securities funds (e.g., funds of OREF, bond funds and former money market funds (MMF) featuring ABS and CDS).

[15] Senior Economist, Investment Company Institute, 1401 H St NW, Washington, DC 20005, USA. Contact email: christof.stahel@ici.org.

The drivers of liquidity – supply, demand, and market participant behaviours
The demand of liquidity

7. *Do you agree with the overarching analysis of the drivers of buyside investor behaviour set out in this section?*
8. *Are the main demand side drivers of liquidity by investor-category accurately described and reflective of events in your experience of the COVID-19 induced market stresses?*
9. *Who in your view were the main drivers of liquidity demand during the COVID-19 induced market stresses and why?*
10. *Given mixed evidence, how significant was the behaviour of long-term investors in driving or mitigating liquidity demand during the COVID-19 induced stresses?*

German 'Spezialfonds' investors' behaviour mostly independent from situation in financial markets. A special characteristic of the 'Spezialfonds' business is the steady inflow of new money, even during difficult market phases. Net inflows have amounted to at least EUR 30 billion in each six-month period for the last ten years. 'Spezialfonds' even recorded inflows in the market turmoils of 2008 and 2011, as well as during the COVID-19 crisis in March 2020. The reason for this is the stable supply of pension contributions and insurance premiums to institutional investors – as well as the particularly long investment horizon of many investors in 'Spezialfonds' (such as insurance companies).

The fact that 'Spezialfonds' investors act conservatively and do not invest cyclically is further illustrated by the following analysis. We have compared monthly net flows (in percent of assets under management) by investor groups since 2000 both to other investor groups, retail fund investors, and the 'Financial Stress Index' (as published by the US Treasury). Of course, this is for illustration purposes only, as we have not carried out a proper econometric analysis. Still, the reported correlations illustrate the (low) level of interconnectedness in the financial system through 'Spezialfonds': **Our core result is that in- and outflows of a particular investor group are mostly independent from other groups' behaviour and the current level of financial stress in financial markets. The largest investor group, retirement benefit schemes even invest more when market turmoil increases, and the correlation coefficient for insurance companies and non-profit organizations is close to zero.** These three groups account for 70 percent of total assets under management. Banks and other corporations react slightly pro-cyclical, but still to a lesser degree than retail fund investors:

		Retirement benefit schemes	Insurance companies	Non-profit organi-zations	Financial institutions	Manufac-turing and service comp.	Other	Retail funds	Financial Stress Index (inverted)
Spezial-fonds by investor category	Retirement benefit schemes	1,00							
	Insurance companies	0,05	1,00						
	Non-profit organizations	-0,07	0,09	1,00					
	Financial institutions	-0,03	0,08	-0,07	1,00				
	Manufacturing and service comp.	-0,02	0,08	-0,03	0,02	1,00			
	Other	-0,05	0,14	0,09	-0,04	-0,15	1,00		
For com-parison	Retail funds	-0,24	0,17	0,06	0,09	0,21	-0,08	1,00	
	Financial Stress Index (inverted)	-0,22	0,02	0,04	0,19	0,23	-0,03	0,29	1,00

Figure 2: Correlation of monthly net flows by investor category in percent of total assets.

Box 2

Example[16]: Stabilizing Effect of the Insurance Industry as 'Spezialfonds'-Investors

One of the main investors in 'Spezialfonds' in Germany is the insurance industry. At the end of 2020, insurers had invested around one-third of their total capital investments of EUR 1,835 billion in 'Spezialfonds'. Insurers as 'Spezialfonds'-Investors act with a long-term perspective. They provide their customers with products that offer risk protection and long-term guarantees, and at the same time have predictable cash flows that enable them to invest assets on a permanent basis.

Insurers' investments are essentially determined by business model-specific requirements. An integral part of investment and risk management is comprehensive asset-liability management, which aligns investment and contractual obligations on the liability side. Due to the often-long-term nature of their contractual obligations, insurers choose long time horizons for their investments. The steady inflow of funds in the form of insurance premiums to be paid by policyholders, current capital gains and regularly maturing securities - in combination with the long-term orientation of investments resulting from the business model - have a stabilising effect on the financial markets.

Unlike other players in the financial markets, insurers do not reallocate or rebalance their investments frequently. In view of the decline in interest rates over the years, insurers have adjusted their allocation and moderately increased alternative investments that still generate adequate returns. Due to the still conservative extent of these reallocations, which also take place over a comparatively long period of several years, there is no evidence of short-term pro-cyclical action in insurers' investments, but merely an adjustment of investment management to the long-term trend of falling interest rates and risk premiums. Moreover, demand for insurance coverage is also relatively independent of economic fluctuations and proves to be robust even in times of crisis, so that no relevant short-term cash outflows result from this. Neither in the year of the global financial crisis in 2008 nor in the course of the COVID-19 crisis were there any significant cancellation rate increases. For example, with regard to the market turmoil at the beginning of the crisis, the German Bundesbank attested in its Financial Stability Report 2020[17] that German insurers had a stable liquidity situation and acted countercyclically on the financial markets in the first quarter of 2020 (tending to buy securities whose risk premiums had risen). According to the Bundesbank, insurers are thus likely to have 'contributed to stabilizing the financial markets.

Also, the influence of the interest rate level on the cancellation rate has also proved to be very limited in German life insurance in the past.

To conclude, for the German insurance industry, there are no indications so far that - under certain conditions, such as in crisis situations - there is a risk of same-direction portfolio reallocations that could exacerbate a decline in the prices of affected assets and thus amplify potential systemic risks.

'Spezialfonds' did not propagate market stress through their investment decisions during the COVID-19 crisis. A second potential way in which 'Spezialfonds' may be interconnected (thus having the potential for the propagation of market stress) is through their investment, or indeed lack of divestment, decisions during periods of financial stress. As already indicated in above observations, even in March 2020, when volatility was particularly high due to widespread fears related to the COVID-19 pandemic, open-ended 'Spezialfonds' reached net <u>inflows</u> of more than EUR 9 billion. This equated to 0.5 percent of total assets at that time (EUR 1.9 trillion). Against the background of the unfolding crisis, fund

[16] Remarks from Gesamtverband der Deutschen Versicherungswirtschaft e. V. (GDV), Berlin.
[17] https://www.bundesbank.de/resource/blob/847060/f947755bc93877a2ca3f33169b3175e1/mL/2020-finanzstabilitaetsbericht-data.pdf.

managers altered the asset allocation of ‘Spezialfonds’ – but only moderately. According to figures collected by Deutsche Bundesbank, they built up cash holdings by EUR 26 billion (increasing their share is the asset mix from 3.8 to 5.6 percent). Bonds accounted for 52.7 percent at the end of March 2020, which is exactly the same share as in the previous month. However, the value of equity held fell by EUR 40 billion (equating to a reduction in total AuM from 13.1 to 11.7 percent). A large part of this effect can be explained by declining asset prices rather than actual divestments, though. After all, the MSCI World IMI fell by more than 14 percent in March 2020. The available data on investment decisions of ‘Spezialfonds’ managers therefore indicate pro-cyclical, but moderate changes in the asset mix.

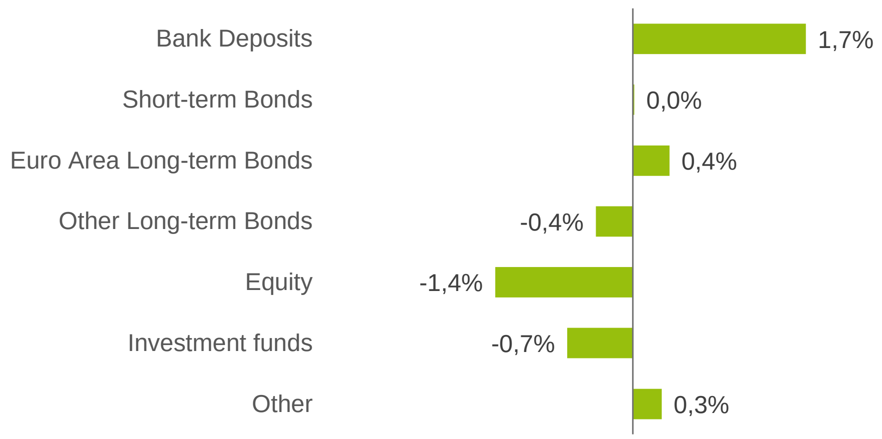

Figure 3: Change in Spezialfonds’ asset class composition during the market turmoil in March 2020

The supply of liquidity – the role of dealers

11. *Do you agree with the overarching analysis of the drivers of liquidity supply and, specifically, how dealer behaviours are set out in this section? Please be specific and explain why.*
12. *What are your views on the relative impact of the drivers of the supply-side in driving the state of liquidity during the COVID-19 induced market stresses?*
13. *Considering the drivers of dealer behaviour, how could the supply of liquidity be improved?*

Not applicable.

Corporate bond markets’ structure and implications on liquidity provision

14. *Do you agree these are the core features of the corporate bond market? Please be specific and explain why.*

We agree with the findings of IOSCO but see an increasing role of electronic bond trading.

Also bond ETF provide additional liquidity to market participants without the need to unload underlying direct bond investments. In particular, bond ETFs are resilient under stressed market conditions. While temporary discrepancies were observed between ETF market prices and their respective net asset values (NAVs), it is noted that bond ETFs, including corporate bond ETFs, continued to trade actively at a time when the market for the underlying bonds had frozen. This suggests that ETFs acted as a price discovery tool for investors in the bond markets where participants faced challenges in finding liquidity and establishing pricing for individual bonds. Bond ETF prices during these times reflected the increased liquidity costs in the underlying bond markets.

Dealer intermediation and concentration

> *15. What are your views on the level of dealer concentration?*
> *16. What could help the market diversify sources of liquidity supply and/or become less reliant on dealer intermediation, particularly in times of stress? Consider both market-led as well as potential regulatory-led solutions.*

Not applicable.

Corporate bond heterogeneity and standardization

> *17. What are your views on standardization in corporate bond markets? What do you think are the pros and cons of increasing standardization and its feasibility?*

We agree with the need for more reduction of fragmentation of the corporate bond markets through standardization of technical features of bonds. However, standardization has its limitations as it curtails the financial flexibility of corporate issuers. Therefore, bond ETF add an element of indirect bond market standardization as they are able to offer a single standardized security which offsets the fragmentation of the underlying multiple bonds held in the ETF. Unlike derivatives, the ETF is fully collaterized.

> **Box 3: Standards and Model Investment Conditions for Corporate Bonds**
> The standards[18] for corporate bonds issued by BVI and the German Association for Financial Analysis and Asset Management (DVFA) specify the tasks, rights and duties of the joint representative of the bond creditors. In addition, the Bond Covenant Group provides model terms and conditions for corporate bonds. The group is an association of British insurance and pension fund associations and British and German investment associations.

Growth of electronic trading

> *18. What are your views on electronification of the corporate bond markets? Has it improved the provision of liquidity?*
> *19. Is the electronification (and any resulting increase in liquidity) of government bond markets over the last decade illustrative of how corporate bond markets could evolve? How and why?*
> *20. What aspects or developments could help to further support increased levels, and the resilience of electronic trading both in normal times and in stress (e.g., availability of data)?*
> *21. Would an increase in all-to-all trading help the provision of liquidity? Is it feasible to increase its use? What are the pros and cons?*

The 2020 crisis impressively showed how the buyside, with the help of bond trading platforms / electronic trading, partly compensated for the failure of the large sell-side dealers in the COVID-19 crisis itself. Open Trading enables buy side firms to become price makers. According to data provided by MarketAxess (a single global bond trading platform), the crisis in March 2020 resulted in:

- the share of buy side responses on Open Trading rising to 24% in March 2020 (v's 17% in Feb '20); and,
- an increase in the number of buy side firms providing prices (131 in Q4 '20 v's 85 in Q4 '19).

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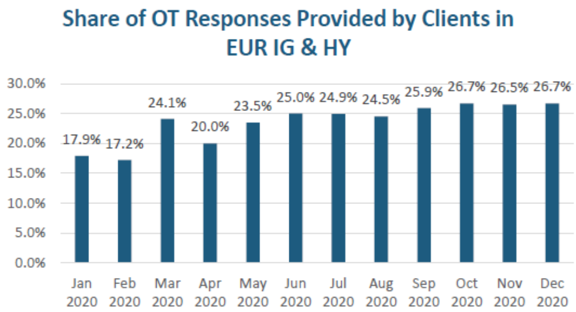
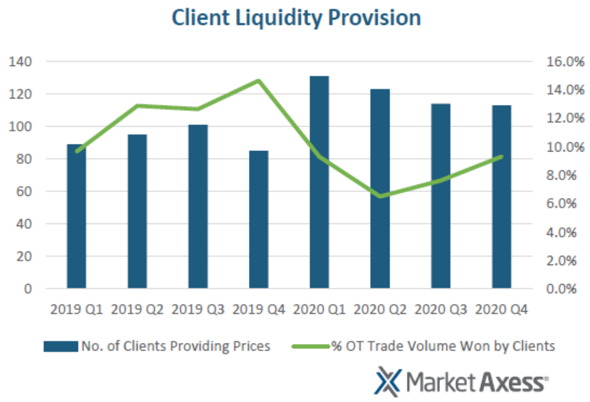
[18] https://www.bvi.de/en/services/samples-and-working-aids/corporate-bonds-standards-and-model-investment-conditions-for-corporate-bonds/.

Settlement fail rates, however, increased by approximately 5-6% across March and April 2020. It is doubtful whether this additional liquidity could have continued to be provided has mandatory buy-ins been in place.





Increased transparency

22. *Do you think there should be more transparency in the corporate bond market, including the level of consolidated information? In which segments of the corporate bond market do you think transparency is most needed?*
23. *Would you consider that pre-trade transparency and post-trade transparency are equally important?*

Proposal for a Consolidated Tape: As representatives of the German buy-side, we are pleased to see an ambitious push from the European Commission to put in a place a consolidated tape (CT) for market data which includes non-equity instruments (bonds). The functioning of the of market for non-equity instruments could benefit from the higher level of transparency. The CT could further strengthen the ability of both institutional investors and retail investors who trade via brokers to improve their trading process and best execution by providing them with immediate access to trading activity, liquidity, and price. The visibility of pre- and post-trade information means that investors would get to see prices and liquidity before they make decisions, ensuring that they can invest efficiently and cost-effectively and enabling them to achieve best execution. Thus, the role of the proposed CT and its impact on market liquidity should be considered in the future.

While we would welcome a post-trade corporate and sovereign bond tape at minutes latency, we see the need for a reduction of deferrals on transactions publication and the harmonization of deferral periods as much as possible while being respectful of market makers needs for adequate masking periods for their risk trades. Pre-trade quotes information should be made available for free or at reasonable prices for all securities which are traded on multilateral trading venues such as Bloomberg MTFs, MarketAxxess, and Tradeweb or dealer quotes which are made available to multiple parties (‘public quotes’).

Liquidity Management

LIQUIDITY MANAGEMENT

General definition of „liquidity risk" of an open-ended investment fund:

"The risk that a position in the fund's portfolio cannot be sold, liquidated or closed at limited cost in an adequately short time frame and that the ability of the fund to repurchase or redeem its units at the request of an investor at any time is thereby compromised."

(cf. Article 3 No 8 of the Directive 2010/43/EU of 1 July 2010 implementing the UCITS Directive).

- **How liquid are the assets of the fund's portfolio?**
- **Is there enough liquidity to fulfil any payment obligations on behalf of the fund?**
- **Is there enough liquidity to fulfil any requests of investors to repurchase or redeem its units?**

➢ **Obligation to implement a liquidity management process**

(According to the AIFMD and the UCITS Directive, the management company is already obliged to implement such a process)

LIQUIDITY MANAGEMENT
Redemption analysis based on monthly data of BVI retail funds

BVI

Redemption analysis in the following categories of retail funds:

- Equity funds
- Bond funds
- Balanced funds
- Property funds

- **Filter for gross & net redemption analysis**
  - Years 2003 – 2015 separately vs. cumulated periods 2003-2006; 2007-2009; 2010-2015
  - Institutional funds included
    - Funds with minimum investment amount of 20 Mln. Euro
    - Funds with minimum asset value of 1 Mln. Euro
    - Funds with attribute “institutional”
  - Last month redemptions (capital payouts) before liquidation excluded

LIQUIDITY MANAGEMENT
Redemption analysis: Results in BVI retail funds

BVI

Gross redemption frequencies* **exceeding** 20% of total net assets:

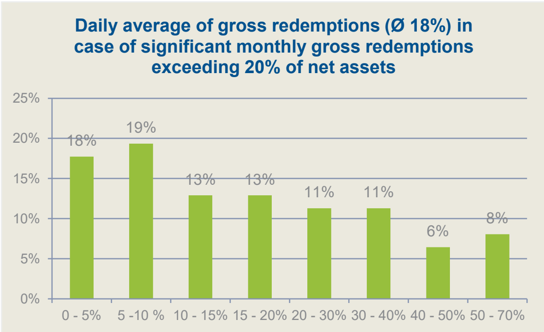
Fund Type	Period 2003 – 2006 Frequency	Period 2007 – 2009 Frequency	Period 2010 – 2015 Frequency
Equity funds	2,98%	4,97%	4,96%
Bond funds	3,34%	6,14%	5,34%
Balanced funds	1,11%	2,26%	2,21%
Property funds	0,56%	1,45%	2,00%

*based on monthly data

LIQUIDITY MANAGEMENT
Redemption analysis: No significant constraints by using monthly data

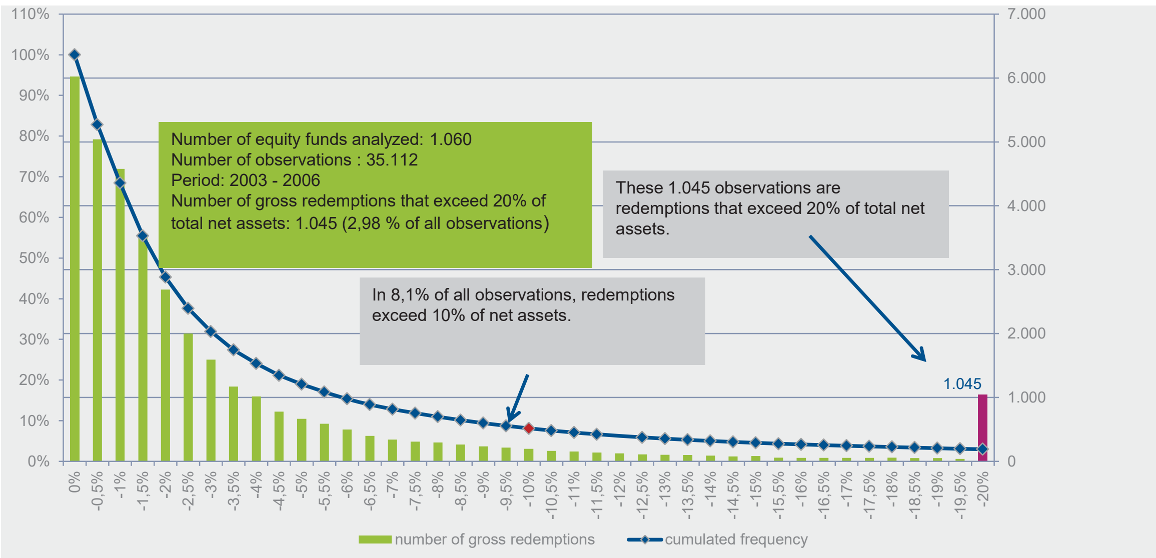
Among significant monthly gross redemptions exceeding 20% of net assets, BVI members were asked for an additional survey based on day-to-day data:

- In 63% of the cases analyzed, daily gross redemptions were below the 20% threshold of net assets, mostly covering an interval of up to 3 days within critical months. In other words, the pattern was for example 1 day of gross sales of 20%, or 3 days of gross sales of about 7%.
- On average, we found daily gross redemptions amounting 18% of net assets.
- Where daily gross redemptions were larger than 20% of net assets, this was part of an coordinated process, e.g. in institutional funds with a few known investors, funds of funds, MMF used for the purpose of liquidity management within a company, or scheduled, planned liquidations.



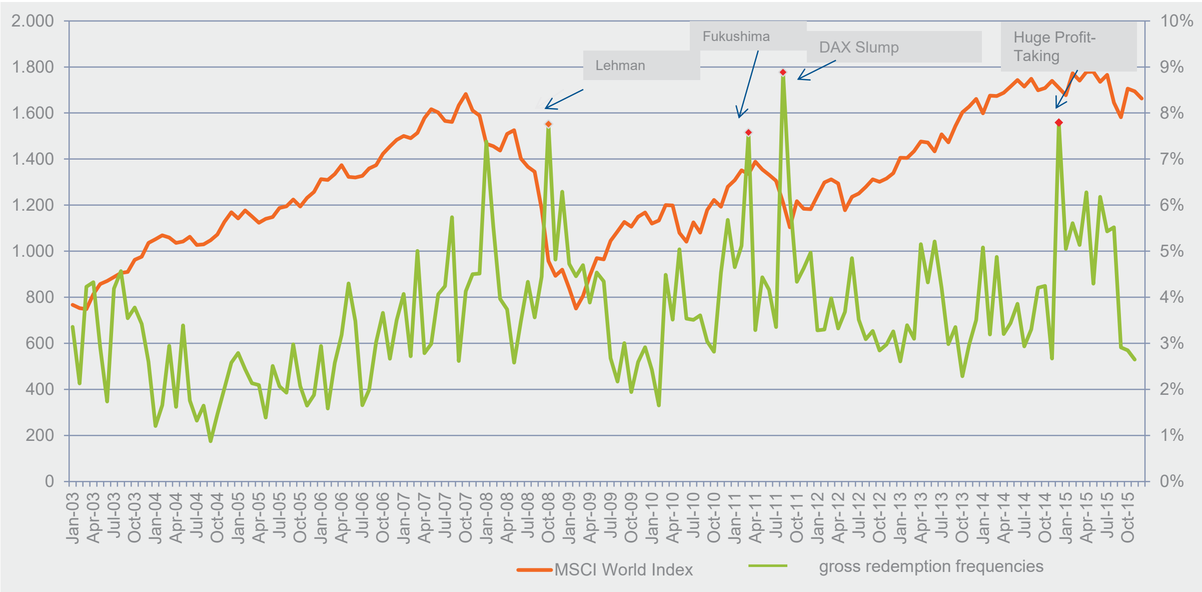
LIQUIDITY MANAGEMENT
Redemption analysis based on monthly data of BVI retail funds

Gross redemptions frequency distribution in equity funds



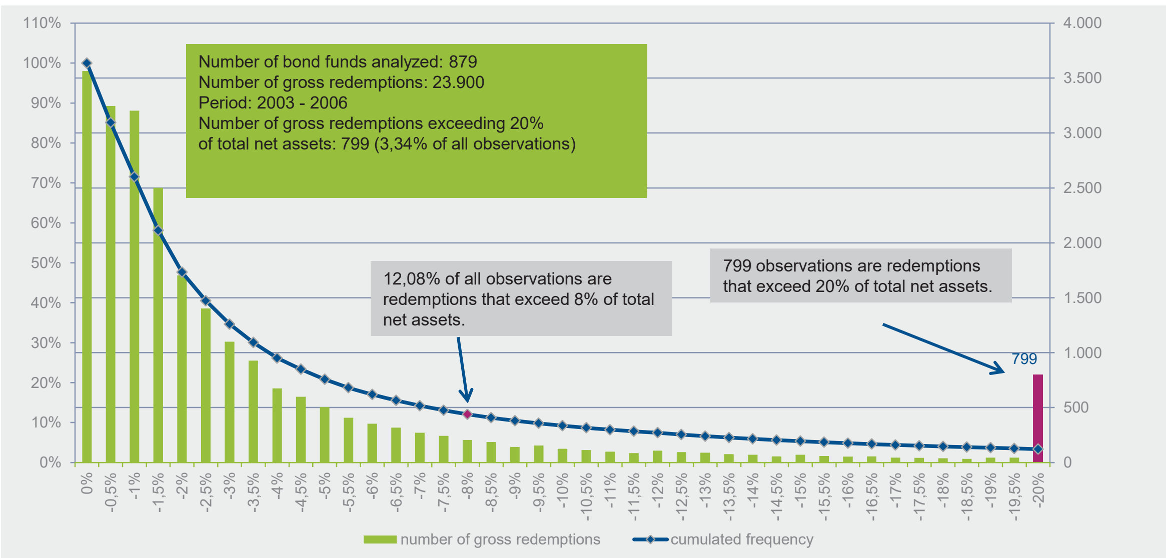
LIQUIDITY MANAGEMENT
Redemption analysis based on monthly data of BVI retail funds

Gross redemptions frequencies exceeding 20% of net assets in equity funds vs. MSCI World Index



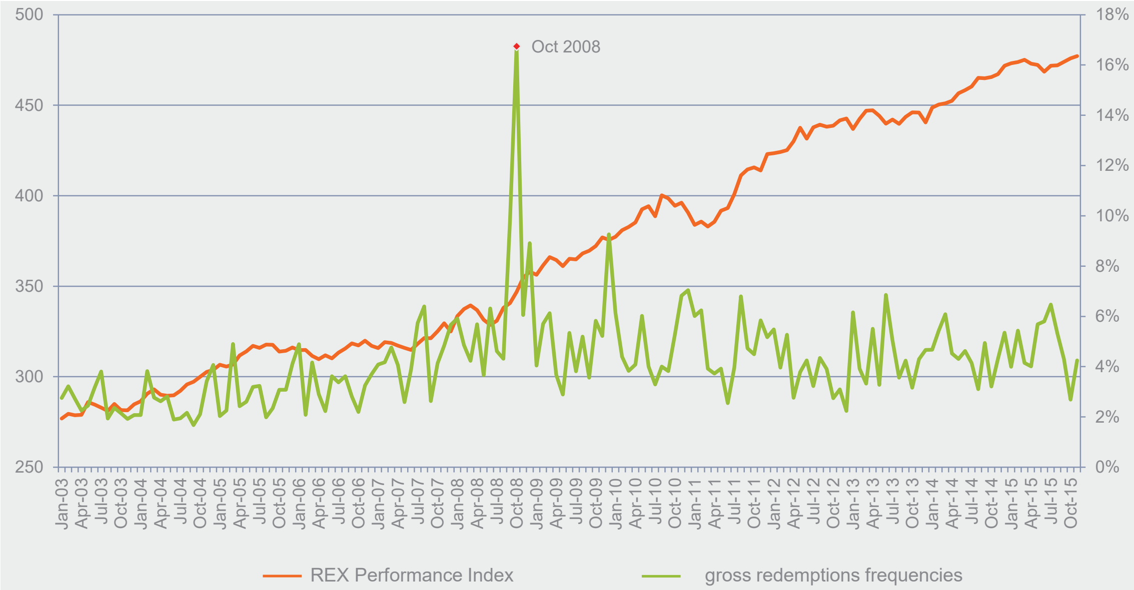
LIQUIDITY MANAGEMENT
Redemption analysis based on monthly data of BVI retail funds

Gross redemption frequencies distribution in bond funds



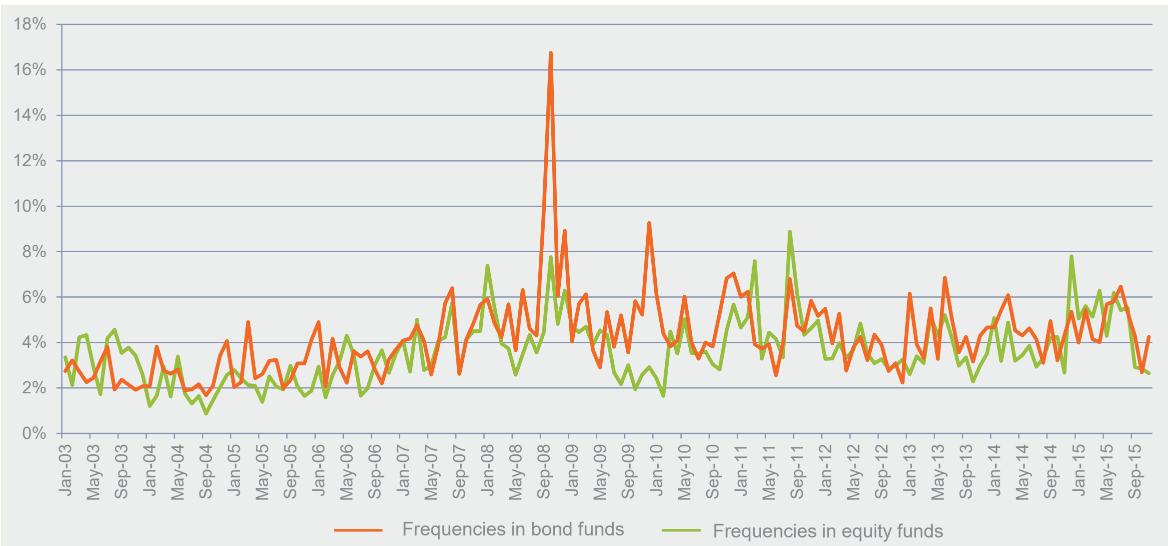
LIQUIDITY MANAGEMENT
Redemption analysis based on monthly data of BVI retail funds

Gross redemption distribution in bond funds vs. REX Performance Index



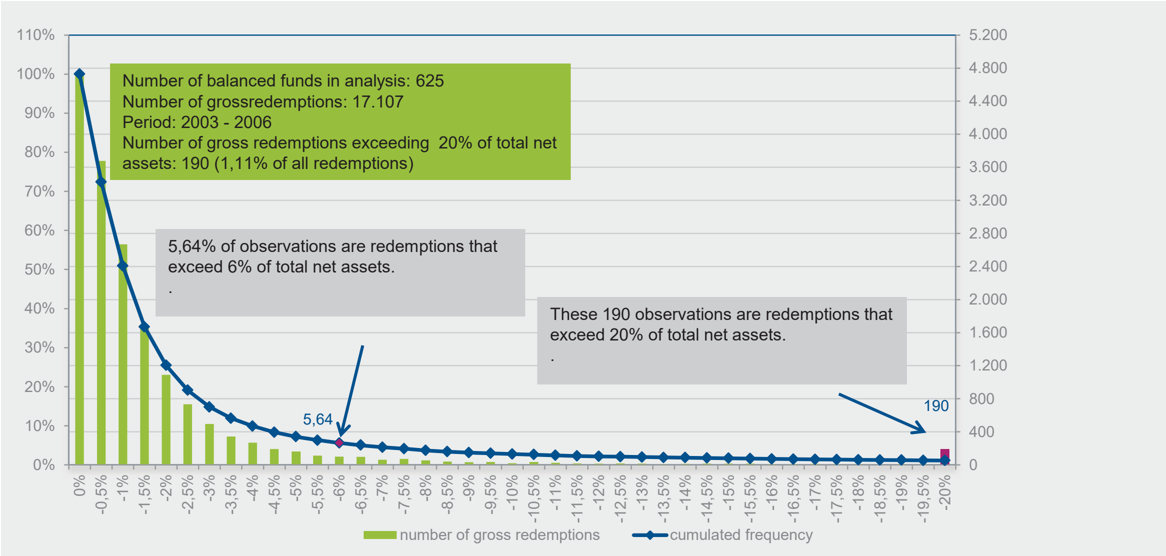
LIQUIDITY MANAGEMENT
Redemption analysis based on monthly data of BVI retail funds

Comparison of gross redemption distribution exceeding 20% of net assets in bond and equity funds



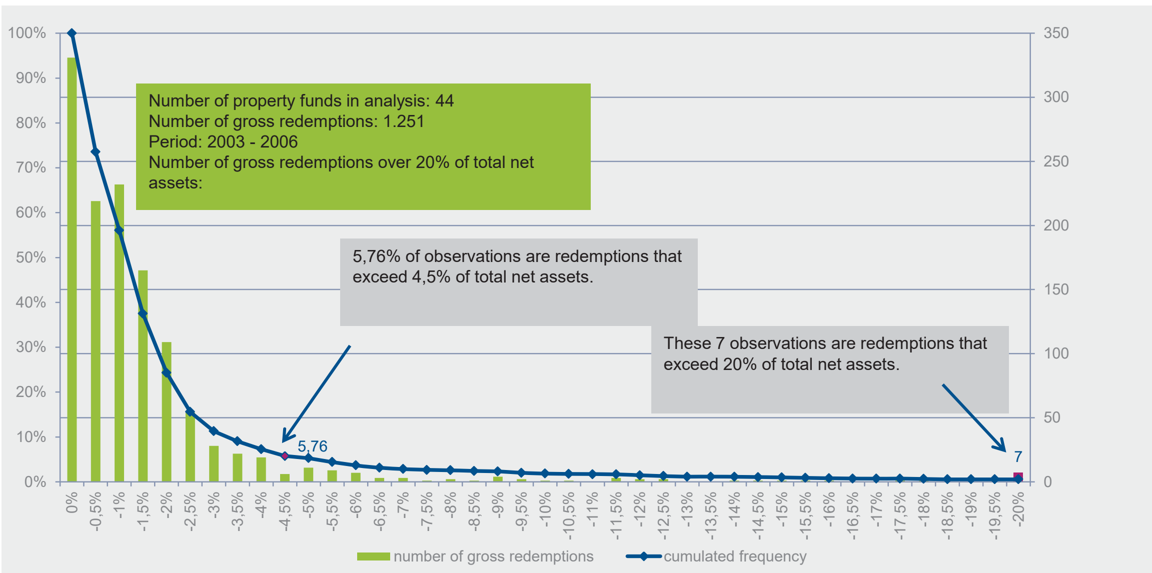
LIQUIDITY MANAGEMENT
Redemption analysis based on monthly data of BVI retail funds

Gross redemption frequency distribution in balanced funds



LIQUIDITY MANAGEMENT
Redemption analysis based on monthly data of BVI retail funds

Gross redemption frequencies distribution in property funds



LIQUIDITY MANAGEMENT
Redemption analysis based on monthly data of BVI retail funds

Distribution of gross redemptions in property funds (including funds in liquidation)